

Amendments to the Drawings:

The drawing sheets attached in connection with the above-identified application containing Figures 2 and 7 are being presented as sheets to be substituted for the previously submitted drawing sheets. Figures 2 and 7 have been amended. Appended to this amendment are annotated copies of the previous drawing sheets which have been marked to show the changes presented in the replacement sheets.

The specific change which has been made to Figure 2 is that the German text has been changed to English.

The specific changes which have been made to Figure 7 is the additions of reference character "100" and its corresponding leader line.

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 9, 14, 18, and 21 are amended. No claims are added or canceled. Claims 1-21 are now pending in this application.

Rejection of claim 18-21 under 35 U.S.C. 112

Claims 18-21 are rejected under 35 U.S.C. 112 because of the terms/phrases “especially” in claim 18 and “in particular” in claim 21. Claims 18 and 21 have been amended to remove these terms/phrases. For at least these reasons, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 2-4 based on Knaggs

Claims 2-4 are rejected under 35 U.S.C. § 102(a) as being anticipated by GB 2 372 536 (“Knaggs”). This rejection should be withdrawn because Knaggs fails to disclose, teach, or suggest the claimed invention.

For example, claim 1 recites that “at least one connecting part for the pivotable connection of the hinge arm to the hinge carrier, wherein the hinge is configured so that the connection of the hinge arm to the hinge carrier is released in the event of an accident by removal and/or destruction of the connecting part due to forces acting in a direction of a pivot axis of the hinge.” Knaggs does not teach at least one connecting part for the pivotable connection of the hinge arm. It is asserted in the Office Action that, in relation to Knaggs, the plate 13 is considered to be the “hinge carrier,” the second arm 12 is considered to be the “hinge arm,” and the pivot pin 15 and the shear pin 18 are considered to be two connecting parts for the pivotable connection of the hinge arm to the hinge carrier. (Paragraph 8 of the Office Action.) However, the pivot pin 15 of Knaggs cannot be the connecting part of claim 2 because the pivot pin is not removed or destroyed due to forces acting in a direction of a pivot axis of the hinge. Indeed, the pivot pin 15 remains attached and intact during the accident, as seen in Figs. 3-4 of Knaggs which show the hinge assembly of Knaggs in normal and collapsed positions. Also, the shear pin 18 cannot be the connecting part of claim 2 because it is merely a securing mechanism that acts as a rigid connection between the arm 11 and the plate 13. (Page 4, lines 2-4 of Knaggs.) A rigid connection simply cannot be a pivotable connection. Because Knaggs does not teach or suggest at least one connecting part

for the pivotable connection of the hinge arm to the hinge carrier wherein the connection of the hinge arm to the hinge carrier is released in the event of an accident by removal and/or destruction of the connecting part, Knaggs does not anticipate claim 2.

Additionally, the hinge assembly of Knaggs is designed to absorb the energy caused by an impact to the hood through the use of a member being deformed. In other words, Knaggs merely suggests a hinge assembly in which a deformable member decreases the impact energy that results from a load exceeding a pre-determined load of the hood moving in the same direction as the pedestrian impacting upon the hood. (Page 4, lines 20-23 of Knaggs.) In contrast, the connection of the hinge arm according to one embodiment of the present invention is released in order to raise the engine hood. Thus, the invention of Knaggs and embodiments of the present invention are different.

Claims 3-4 depend from and contain all the features of claim 2, and are allowable for the reasons above, without regard to the further patentable features contained therein.

For at least these reasons, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 2, 4-13, and 16-18 based on Matsuura

Claims 2, 4-13, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,182,782 (“Matsuura”). This rejection should be withdrawn because Matsuura fails to disclose, teach, or suggest the claimed invention.

For example, claim 2 recites that “at least one connecting part for the pivotable connection of the hinge arm to the hinge carrier, wherein the hinge is configured so that the connection of the hinge arm to the hinge carrier is released in the event of an accident by removal and/or destruction of the connecting part due to forces acting in a direction of a pivot axis of the hinge.” Matsuura does not disclose or suggest these features. It is asserted in the Office Action that, in relation to Matsuura, the base 22 is considered to be the “hinge carrier,” the supporting arm 27 is considered to be the “hinge arm,” and the middle link 28 and hinge pins 26 are “connecting parts.” (Paragraph 10 of the Office Action.) However, the middle link 28 cannot be considered to be the “connecting part” because is not a pivotable connection of the hinge arm to the hinge carrier but merely a linking member connected to the hinge pin 26. In other words, the middle link 28 is not the mechanism that allows the pivoting of the supporting arm 27 relative to the base 22. Also, the hinge pin 26 cannot be the connecting

part because the pivot connection between the base 22 and the supporting arm 27 is not released by the removal and/or destruction of the connecting part due to forces acting in a direction of a pivot axis of the hinge. Indeed, the removal of the hinge pin 26 is caused by the force of the piston 21a of the actuator 21 acting on the hood, which is in the vertical direction and not in a direction of the pivot axis of the hinge. (See Figures 5-6 of Matsuura.) Because the hinge pin 26 is not removed by a force acting in a direction of the pivot axis of the hinge, the hinge pin 26 of Matsuura cannot be considered to the connecting part of claim 2. Because Matsuura does not teach or suggest at least one connecting part for the pivotable connection of the hinge arm to the hinge carrier wherein the connection of the hinge arm to the hinge carrier is released in the event of an accident by removal and/or destruction of the connecting part due to forces acting in a direction of a pivot axis of the hinge, Matsuura does not anticipate claim 2.

Claims 4-13, and 16-17 depend from and contain all the features of claim 2, and are allowable for the reasons above, without regard to the further patentable features contained therein.

Claim 18 (as amended) recites “wherein the airbag is configured to release the hood from the vehicle body using forces generated by the airbag that act in a direction of a pivot axis of the hinge when the airbag is deployed in a region of the hinge.” Matsuura does not teach or suggest this feature. The airbag of Matsuura does not release the hood from the body vehicle but is deployed after the hood is released from the vehicle body by the actuators 21. (See column 2, lines 36-47; column 2, lines 54-63; and column 5, lines 43-35 of Matsuura.) Also, Figure 29 of Matsuura does not teach that the hood is released from the vehicle body using forces generated by the airbag that act in the direction of the pivot axis of the hinge. Indeed, the airbag of Figure 29 of Matsuura releases the hood from the vehicle body using forces generated by the airbag that act in a vertical direction of the hood. Thus, Matsuura does not teach or suggest all the features of claim 18, and the rejection should be withdrawn.

For at least these reasons, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 18-20 based on Son

Claims 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,668,962 (“Son”). This rejection should be withdrawn because Son fails to disclose, teach, or suggest the claimed invention.

For example, claim 18 (as amended) recites that “wherein the airbag is configured to release the hood from the vehicle body using forces generated by the airbag that act in a direction of a pivot axis of the hinge when the airbag is deployed in a region of the hinge.” Son does not disclose or suggest these features. Son discloses a lifter 20 with an expansion 34 that merely expands and lifts the fixing arm member 22 of the hinge structure 20 upwards. (Column 3, line 46 to column 4, line 1 of Son.) The lifting is not a force generated by the airbag that acts in a direction of a pivot axis of the hinge but acts perpendicular to the pivot axis. Thus, Son does not teach or suggest all the features of claim 18, and the rejection should be withdrawn.

Claims 19-20 depend from and contain all the features of claim 18, and are allowable for the reasons above, without regard to the further patentable features contained therein.

For at least these reasons, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 14-15 based on Matsuura and Knaggs

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura in view of Knaggs. Claims 14-15 depend from and contain all the features of claim 2. As previously mentioned, Matsuura does not teach or suggest at least one connecting part for the pivotable connection of the hinge arm to the hinge carrier wherein the connection of the hinge arm to the hinge carrier is released in the event of an accident by removal and/or destruction of the connecting part due to forces acting in a direction of a pivot axis of the hinge. Knaggs does not cure these deficiencies. Thus, no combination of Matsuura and Knaggs teaches or suggests all the features of claim 2 and its dependent claims 14-15. Claims 14-15 are allowable for at least these reasons, without regard to the further patentable features contained therein. Reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 19-21 based on Matsuura and Debler

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura in view of U.S. Patent 2003/0001366 (“Debler”). Claims 19-21 depend from and contain all the features of claim 19. As previously mentioned, Matsuura does not teach or suggest the hood is released from the vehicle body using forces generated by the airbag that act in the direction of the pivot axis of the hinge. Debler does not cure these deficiencies. Thus, no combination of Matsuura and Debler teaches or suggests all the features of claim 18 and its dependent claims 19-21. Furthermore, Matsuura teaches that the arrangement of Figure 29 is undesirable because it is difficult to reduce the size of the gas generator. (column 1, lines 41-47 of Matsuura.) One with ordinary skill in the art would not have a reason to combine Figure 29 of Matsuura with the teachings of Debler because Matsuura teaches away from such a combination.¹ Accordingly, claims 19-21 are allowable over the prior art for at least these reasons, without regard to the further patentable features contained therein. Reconsideration and withdrawal of the rejection is respectfully requested.

Conclusion

It is believed that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.


The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

¹ “It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).” MPEP 2145.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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